REMARKS

The above Amendments and these Remarks are in reply to the final Office Action dated November 29, 2005, and the advisory Office Action dated January 25, 2006. Claims 1, 2, 4-12 and 17-30 were pending in the Application prior to the outstanding Office Action. Claims 1, 9, 17 and 24 are being amended. No claims are presently being canceled or added. Accordingly, claims 1, 2, 4-12 and 17-30 remain for the Examiner's consideration, with claims 1, 9, 17 and 24 being independent. Reconsideration and withdrawal of the outstanding rejections are respectfully requested.

I.   Claim Rejections Under 35 U.S.C. § 103

Claims 1, 2, 4-12 and 17-30 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,112,225 to Kraft et al. (hereafter "Kraft ") in view of U.S. Patent No. 6,230,183 to Yocom et al. (hereafter "Yocom").

II.   Examiner Interview

Applicants thank the Examiner for the telephonic interview that took place on February 21, 2006 between Examiner Zhen and Applicants' undersigned representative Jeffrey Kurin. During the interview a proposed amendment to claim 1 was discussed. At the end of the interview, the Examiner said he would speak with his supervisor to determine whether the proposed amendment distinguished claim 1 from the prior art. On March 1, 2006, the Examiner left a message on Jeffrey Kurin's voicemail indicating that he and his supervisor had agreed that the proposed amendment distinguished claim 1 from the prior art, but that new issues are raised by the proposed amendment which would require another search. Accordingly, Applicants have filed an RCE so that the amended claims will be considered by the Examiner. The substance of the amendment to claim 1 is discussed below.

9

III. Discussion of Claims

A.   Claims 1-2 and 4-8

The invention of **claim 1** relates to a job management apparatus for use in a batch job execution system including a plurality of service providers in communications with the job management apparatus. As explained on page 11, beginning at line 8, the service providers that interface with the job execution system are capable of operating independently from one another and independently from the job execution system. Also, as explained on page 12, beginning at line 8, in some embodiments the service providers can interface with a plurality of job execution systems. This means that when a particular service provider is not performing a task for a particular job execution system, that service provider can be performing a task for itself and/or for another job execution system.

Claim 1 has been amended to further distinguish the "idle assignment signal" feature from the "suspend" feature of Yocom. More specifically, claim 1 as amended now states that "the assigning part sends an idle assignment signal to each service provider from which the request work signal is received but for which there is not a task available from the job management apparatus, the idle assignment signal informing the service provider to not send further request work signals to the assigning part until the service provider receives a work available signal from the assigning part, thereby freeing up resources of each service provider for which there is not a task available from the job management apparatus to perform other tasks not delegated by the job management apparatus."

Support for the amendment to claim 1 is at least provided at page 12, lines 8-16, which says:

> In some embodiments, service providers interface with a plurality of job execution systems. For example, in Fig. 1, service provider 106c performs a French-to-English translation service for both batch job execution system 100 and another batch job execution system not shown in Fig. 1. Provider 106c performs multiple tasks for the various job execution systems using multiple threads or processes. To that end, any particular service provider used in an embodiment of a job execution system of the present invention may perform multiple tasks

10

simultaneously using threads, processes, people, or other programs running on multiple computers.

In other words, it is clear from the specification that a service provider can perform tasks for multiple batch job execution systems, and that a service provider can perform multiple tasks simultaneously. Thus, it is also clear that if a service provider is instructed to stop sending work request signals to an assigning part of a specific job management apparatus, then resources of that service provider are freed up to perform other tasks not delegated by that specific job management apparatus (e.g., to perform tasks delegated by another job management apparatus, or to perform its own tasks).

As explained on page 25, beginning at line 10, the idle assignment feature reduces the time and costs associated with a service provider repeatedly sending request work messages to a job management apparatus having no tasks available to delegate to that service provider.

It was admitted in the final Office Action that Kraft does not teach that an assigning part "sends an idle assignment signal to each service provider from which the request work signal is received but for which there is not a task available, the idle signal informing the service provider to not send further request work signals until the service provider receives a work available signal", as required by claim 1. However, it was previously asserted in the final Office Action that column 5, lines 21-50 of Yocom teaches these deficiencies of Kraft. As discussed during the Examiner interview, this portion of Yocom explains that when a server 163 is ready to run a new work request, the server 163 calls the work manager 160 for a new work request. The work manager 160 passes the request to the server 163 if there is a request on the work queue that the address space is serving and the request has affinity for the system on which the server 163 is runner. Otherwise, the work manager 160 **suspends** the server 163 until a request 162 is available.

As discussed during the Examiner interview, suspending a server until a task is available for the server (as is done in Yocom), is quite different than informing a service provider to not send further request work signals until the service provider receives a work available signal (as is done in the invention of claim 1). When a server is "suspended" in Yocom, that server it not capable of performing any tasks for itself and/or

11

for any other work managers. Simply stated, when a server is suspended it is not capable of performing any tasks. In contrast, in the invention of claim 1, the idle assignment signal only causes the service provider (for which the job management apparatus does not currently have a task) to stop sending request work signals to that job management apparatus, so that resources of the service provider are not wasted. However, the idle assignment signal does not suspend the service provider. Rather, because the idle assignment signal only causes the service provider (for which the job management apparatus does not currently have a task) to stop sending request work signals to the job management apparatus, this actually frees up the service provider to more efficiently perform tasks for itself and/or for any other job management apparatus with which it may communicate. This should now be clear from claim 1, as amended.

As mentioned above, the Examiner has admitted that claim 1, as amended, is now distinguishable over what is disclosed in Yocom. Accordingly, Applicants respectfully request that the 103(a) rejection of claim 1 be reconsidered and withdrawn.

Claims 2 and 4-8 are believed to be patentable for at least the reason that they depend from claim 1, as well as for the additional features that they add to claim 1. For example, **claim 5** is discussed below.

Claim 5 specifically requires that "the work request signal specifies a minimum frequency at which the status report signal will be sent to the contact part." Claim 5 depends from claim 4, which depends from claim 1. Claim 5 requires that the "work request signal" specifies a minimum frequency at which a service provider will send a "status report signal" to the contact part. Claim 4 specifies that the "status report signal" updates the status of the task being performed by the service provider. Claim 1 specifies that this "work request signal" is received by an assigning part from a service provider that is available to perform work. So, in summary, claim 5 requires that the work request signal (received from a service provider), also includes the minimum frequency at which the service provider (to which the task is delegated) will update the status of the task. As explained on page 22, beginning at line 8, this enables the contact part to know when to expect "status update signals". By knowing this minimum frequency, the contact part can

12

determine when there may have been a malfunction with a service provider because a "status update signal" was not received from the service provider within the minimum frequency. The contact part can then take appropriate action (e.g., check on status and/or reassign task to another service provider).

It was alleged in the Office Action that column 7, lines 52-57 of Yocom teaches the features of claim 5. However, this portion of Yocom merely states that a multisystem goal-driven performance controller (MGDPC) function is performed periodically based on a periodic timer expiration. The MGDPC "performs the functions of measuring the achievement of goals, selecting the user performance goal classes that need their performance improved, and improving the performance of the user performance goal classes selected by modifying the controlled variables of the associated work units" (see Yocom, column 7, lines 47-52). In other words, the MGDPC of Yocom periodically determines the performance and goals of an operating system. There is nothing in Yocom that teaches or suggests that a work request signal (received from a service provider that is requesting work) includes the minimum frequency at which the service provider (to which the task is delegated) will update the status of a task it is delegated, as required by claim 5. Accordingly, for this additional reason, Applicants again respectfully request that the rejection of claim 5, and **claim 6** which depends from claim 5, be reconsidered and withdrawn.

B.   Claims 9-12

Independent **claim 9** requires "a plurality of provider managers, each in communication with the job management apparatus and in communication with a corresponding subset of the plurality of service providers which monitors the tasks being performed on the service providers and provides status information to the job management apparatus." This is shown, e.g., in FIG. 2 of the present application. In this arrangement, a first provider manager (e.g., Provider Manager A labeled 214 in FIG. 2) can communicate with and monitor a first subset of service providers (labeled 206a - 206c in FIG. 2) that perform similar functions to one another, while a second provider manager (e.g., Provider Manager B labeled 216 in FIG. 2) communicates with and monitors a second subset of the service providers (labeled 208a - 208c in FIG. 2) that

13

perform similar functions to one another (but whose functions are not similar to the functions performed by the first subset of service providers). Thus the system of claim 9 provides for more distributed processing, which should reduce the likelihood of backlogs of work developing (see page 15, line 16 - page 16, line 2 of the present application).

It was alleged in the Office Action that the task manager 206 of Kraft, shown in FIG. 2, and discussed at column 4, lines 48-61; column 5, lines 3-13; and column 9, lines 10-17, teaches the above mentioned features of claim 9. More specifically, it appears that the Examiner is asserting that because Kraft teaches a plurality of task managers 206 (i.e., each peripheral computer includes a task manager), with each task manager 206 controlling a screen saver 204, a task execution engine 208 and a buffer 210, that Kraft teaches "a plurality of provider managers, each in communication with the job management apparatus and in communication with a corresponding subset of the plurality of service providers which monitors the tasks being performed on the service providers and provides status information to the job management apparatus", as required by claim 9. Applicants respectfully disagree, as explained below.

In rejecting claim 9, it is asserted in the Office Action that the "peripheral computers 106" of Kraft teach the "plurality of service providers" of claim 9. It is also asserted in the Office Action that the "task managers 206" of Kraft teach the "plurality of provider managers" of claim 9. However, it is clear from claim 9 that each claimed provider manager is separate and distinct from the "service providers" with which it communicates and monitors. This can be seen, e.g., in FIG. 2 of the present application. In contrast, in Kraft, each "task manager" is clearly part of the "peripheral computer". Further, in Kraft it is clear that each "task manager" only controls the screen saver 204, task execution engine 208 and buffer 210 within the same peripheral computer as the task manager. Thus, the "task manager" of Kraft does not communicate with and monitor tasks being performed "on a subset of the plurality of service providers."

The Examiner may be asserting that the screen saver 104, the task execution engine 208 and the buffer 210 are the "subset of service providers" that the task manager 206 is communicating with and monitoring. However, the screen saver 204 and buffer 210 are clearly not service providers capable of performing tasks of a batch job. Thus, the only possible service provider that the task manager 206 is communicating with and

14

monitoring is the "task execution engine 108" within the same peripheral computer as the task manager. However, this does not make sense since it was already asserted that the "peripheral computers" of Kraft teach the "service providers" of claim 9. Nevertheless, to further distinguish claim 9 from Kraft, claim 9 has been amended to explain that "at least one said subset of the plurality of service providers includes multiple service providers."

Applicants respectfully assert that claim 9 is now clearly patentable over Kraft. Applicants respectfully request that the Examiner allow entry of this amendment to claim 9.

For at least the above reasons, Applicants respectfully request that the 103(a) rejection of claim 9, and its dependent **claims 10-12** be reconsidered and withdrawn.

C. Claims 17-23

Independent claim 17, as amended, includes the step of "sending an idle assignment signal to each service provider from which the request work signal is received but for which there is not a task available from the job management apparatus, the idle assignment signal informing the service provider to not send further request work signals to the job management apparatus until the service provider receives a work available signal from the job management apparatus, thereby freeing up resources of each service provider for which there is not a task available from the job management apparatus to perform other tasks not delegated by the job management apparatus."

For similar reasons to those discussed above with regards to claim 1 and its dependent claims, Applicants assert that claim 17, and its dependent claims 18-23 are patentable over the applied references.

Claim 17 also includes the step of "sending a work available signal to each service provider that was previously sent the idle assignment signal but for which a task is available from the job management apparatus." It was alleged in the Office Action that column 5, lines 30-50 of Yocom teaches this step. However, column 5, lines 30-50 of Yocom merely explains how the work manager builds a work queue. Column 5, lines 5-9 does state that address space that contains one or more server is started by the workload manager to service requests. However, sending a work available signal to a service

provider (that was previously sent the idle assignment signal but for which a task is available), as in claim 17, is quite different than Yocom starting a server that was presumptively previously not started or was suspended. For this additional reason, Applicants again assert that claim 17, and its dependent claims 18-23 are patentable over the applied references.

D.   Claims 24-30

Independent claim 24, as amended, states that "the assigning software component sends an idle assignment signal to each service provider that sent a request work signal but for which there is not a task available from the assigning software component, the idle assignment signal instructing the service provider to not send further request work signals until the service provider receives a work available signal from the assigning software component, thereby freeing up resources of each service provider for which there is not a task available from the assigning software component to perform other tasks not delegated by the assigning software component." For similar reasons to those discussed above with regards to claim 1 and its dependent claims, Applicants assert that claim 24, and its dependent claims 25-30 are patentable over the applied references.

III. Conclusion

In light of the above, it is respectfully requested that all outstanding rejections be reconsidered and withdrawn. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this reply, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: 3/17/06   By: _____
                                     Jeffrey R. Kurin
                                     Reg. No. 41,132

FLIESLER MEYER LLP
Four Embarcadero Center, Fourth Floor
San Francisco, California 94111-4156
Telephone: (415) 362-3800
Facsimile: (415) 362-2928
Customer No. 23910